Aggression as a trait: the Dark Tetrad alternative

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Aggression is often construed as a unitary trait fully captured by the Buss–Perry Aggression Questionnaire (BPAQ). Our review of the literature questions that assumption in several respects. Instead of a top-down approach, we argue for a bottom-up conception based on the Dark Tetrad of personality, that is, narcissism, Machiavellianism, psychopathy, and sadism. We highlight research showing that each member of the tetrad responds to different provocations. We conclude that the unitary trait conception of aggression has yielded more confusion than understanding. The term aggression should be reserved for outcomes, with many possible trait × situation predictors. Future research should continue the investigation of moderators as well as cognitive mediators to clarify the triggering of aggression in the individual tetrad members.

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In common parlance, aggression is a trait, that is, a stable and enduring style of thinking, acting, and feeling that can be measured on a continuum of individual differences [1]. By far the most popular trait measure is the Buss–Perry Aggression Questionnaire (BPAQ) [2] and its predecessor. Because of that popularity, much of the research on trait aggression has assumed the reality of that construct as the starting point. Unfortunately, that assumption has led to much confusion as to the nature of the trait. Factor analyses and other decompositions have yielded a broad range of content including assault, verbal aggression, suspicion, neurotic aggression, impulsive aggression, social-cognitive aggression, instrumental aggression, hostile aggression, alienation, anger, irritability, and social desirability, among others [3,4•]. Given this jumble of precipitators, processes and outcomes, it is questionable that the revered BPAQ actually captures a fundamental personality construct.

The evaluation of links to fundamental personality models, namely, the Big Five or HEXACO, has further undermined the case for a unitary understanding of trait aggression. To begin with, no aggression factor emerges in such comprehensive factor models. Instead, a spate of studies have linked the BPAQ with specific combinations of fundamental traits. Considering that the Big Five and HEXACO factors were designed to be orthogonal, this complexity of associations precludes a simple understanding of aggression and its relation to other traits.

In the present review, we question the value of reifying aggression with the assumed gold standard, that is, the BPAQ. Instead of this a top-down approach, we will argue for a bottom-up approach beginning with an underlying set of malevolent traits, namely, the Dark Tetrad [5••]: That is, narcissism, Machiavellianism, psychopathy, and sadism.

Before we elaborate on that model, it is worth acknowledging another key weakness with a unitary trait approach. It has become clear that individual differences in personality interact with situational settings to provoke aggressive behaviors. That perspective was supported in the definitive meta-analysis by Bettencourt *et al.* [4•]. They found that whereas some personality traits (*e.g.*, irritability) predict aggression across all situations, other traits are associated with aggression only under specific conditions. Such moderator elements are evident in much of the subsequent research on aggression [6–9]. The specificity of situational triggers was exemplified in a daily diary study: The authors identified five categories of anger and aggression triggers, which, despite the inclusion of personality traits, captured the majority of variance in daily aggression and feelings of anger [10].

In this article, we not only acknowledge moderator elements but go further to suggest that aggression is an intrinsically interactive process. We honor these notions while advancing the argument that moderation effects should be investigated at the level of the Dark Tetrad traits, rather than at the level of a (questionable) unitary trait. To update our earlier review [11], we will emphasize work from the last decade.

Personality, situational, and mediating factors

Before we cover the Dark Tetrad literature, it is important to review two key topics from mainstream aggression research: (a) cognitive explanations of trait aggression and (b) links to standard trait models. Both bear on our critique of a simple unitary trait model for aggression.

Big Five/HEXACO factors

It has become standard practice in trait research to differentiate other traits from fundamental sets such as the Big Five or HEXACO. That requirement applies to the study of trait aggression. The most consistent links are with low Conscientiousness, low Agreeableness and high Neuroticism [12–14]. The first two factors tend to be linked to impulsivity whereas neuroticism is commonly linked to anger issues. Although these links can be theoretically justified, it seems impossible to build a unitary trait by postulating a common theme among three orthogonal factors.

The HEXACO factor model includes the Big Five plus an extra factor—Honesty/Humility. In the most recent germane study, Agreeableness predicted three of five bullying categories; but Honesty–Humility was linked to all five, including verbal, physical, social, sexual, and racial subtypes [15].

The role of cognition

The traditional temperament model assumes that genetic differences explain trait differences in aggression [16]. That approach has been challenged by cognitive approaches advocating that social information structures can trigger aggression or, at least, intervene between the impelling force of traits and overt aggression. Most influential is the *hostile attributional bias*: here, individual differences in aggression are explained as a reaction to assuming hostile intent in others. Recent evidence supports that claim across time and culture [17•].

Although the framework is more comprehensive, cognitive elements are also central to the *General Aggression Model* [18]: It holds that social knowledge structures, including scripts and schemas, are critical to the decision to aggress or not to aggress. Such social knowledge can be very elaborate and differentiated: Hence this model can also accommodate a great degree of personality × situation complexity. Most supportive are recent studies indicating significant mediation between traits and aggressive behavior [19]. One recent study included the Big Five traits and General Aggression Model social knowledge variables [20•]. Results indicated that cognitive variables including situational triggers provided virtually complete mediation between the Big Five traits and aggressive behavior.

The demonstration of cognitive mediation is important in questioning the direct impact of a unitary aggression construct. Along with the added complexity of moderator effects, mediation effects suggest that intervening psychological processes play a key role.

The Dark Tetrad: empirical links with aggression

In recent years, research on individual differences on aggression has turned to a small set of personality constructs known as the *Dark Tetrad* [5••]. The tetrad consists of four inter-correlated personality traits (Machiavellianism, narcissism, psychopathy, and sadism). Although theoretically distinct, current measures of the four variables tend to overlap substantially [21]. The common core appears to be callous manipulation [22•]. Rather than criminal or clinical samples, most of this research has been conducted on normal (*e.g.*, student, work, and community) samples. Undoubtedly, the dramatic surge in research has been facilitated by the publication of Dark Triad combination measures [23,24•]. Now available is a more comprehensive inventory that includes the fourth component of the Dark Tetrad, that is, the sadistic personality [25].

The tetrad members tend to show different patterns of associations with aggression, whether self-reported, observer-reported, or behavioral. Strongest and most consistent are links with psychopathy [26,27]. This pattern is consistent with the short-term mating strategy associated with psychopathy: These individuals (especially men) seek indiscriminate sexual contacts [23,28]. Individual links of aggression with narcissism [29,30] and sadism [31] have also been found.

Most important for our model are studies that include three or four of the dark personalities. This multivariate methodology helps control for the overlap among members, thereby avoiding possible misattribution of the effect of one tetrad member to another unmeasured member. To date, the bulk of such research has involved the Dark Triad (all but sadism) but work with the full tetrad is growing. The studies below follow the multivariate recommendation by including multiple dark personalities as predictors.

Psychopathy

One example is a recent latent variable approach to the Dark Triad and dispositional aggression [32]. Although the data confirmed a common factor linking the Dark Triad core (callousness manipulation) to the common core of aggression, psychopathy added unique variance. In particular, psychopathy had a strong and direct link to physical aggression, above and beyond the common variance of the Dark Triad. This finding is consistent with other research indicating that, in predicting aggression, psychopathy out-performs other triad members as well as the Big Five [28,33–35].

Narcissism

When narcissism and self-esteem are pitted head-to-head in predicting aggression, narcissism typically wins the day [30]. (In fact, contrary to conventional wisdom, low self-esteem does not predict aggression [36]). But when other tetrad members are controlled, narcissism has little association with aggression under normal circumstances—presumably any aggressive component is accounted for